MITSUBISHI MOTOR SALES OF AMERICA, Inc.

TECHNICAL SERVICE BULLETIN

SUBJECT: **HIGH ALTITUDE MODIFICATIONS - 1989 TRUCKS AND MONTERO**

NO.	TSB-88-25-001
DATE	July, 1988
MODEL	1989 Truck and Montero

PURPOSE

1989 Truck (2.0L and 2.6L engine) and Montero (2.6L engine only) vehicles distributed to high-altitude market areas must be modified for high-altitude operation by the dealer before sale. Modifications consist of advancing the ignition timing and installing a High Altitude Compensator (HAC), vacuum hose assembly, underhood label and replacing the distributor vacuum advance mechanism.

VEHICLES TO BE MODIFIED

1989 model Truck and Montero vehicles, 2-wheel drive and 4-wheel drive models, 2.0L and 2.6L engines only. The 3.0L engine (V6) used in the Montero has been certified for all altitudes and requires no modification.

GEOGRAPHIC APPLICATION

If a 1989 vehicle's ultimate intended use in one of the following high altitude states and counties, it must be equipped with a high altitude kit.

HIGH ALTITUDE STATES AND COUNTIES

State of Arizona

Apache	Navajo
Cochise	Yavapai
Coconino	

State of Colorado

All counties

State of Idaho

Bannock	Franklin
Bear Lake	Fremont
Bingham	Jefferson
Blaine	Lemhi
Bonneville	Madison
Butte	Minidoka
Camas	Oneida
Caribou	Power
Cassia	Teton
Clark	Valley
Cluster	

State of Montana

Beaverhead	Madison
Deer Lodge	Meagher
Gallatin	Park
Jefferson	Silver Bow
Judith Basin	Wheatland
Powell	

State of Nebraska

Banner	Kimball
Cheyenne	Sioux

State of Nevada

All counties

State of New Mexico

All counties

State of Oregon

Harney	Klamath
Lake	

State of Texas

Jeff Davis	Parmer
Hudspeth	

State of Utah

All counties

State of Wyoming

Albany	Natrona
Campbell	Niobrara
Carbon	Park
Converse	Platte
Fremont	Sublette
Goshen	Sweetwater
Hot Springs	Teton
Johnson	Uinta
Laramie	Washakie
Lincoln	Weston

WARRANTY INFORMATION

Labor Operation Code: 25 05 30 01
Time Allowance: 0.7 hr.

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FILE UNDER: Group 25 Emission Control Systems in the 1988 Technical Service Bulletin Binder.

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CIRCULATE TO:

- [x] SERVICE ADVISOR
- [x] GENERAL MANAGER
- [x] SERVICE MANAGER
- [x] PARTS MANAGER
- [ ] WARRANTY PROCESSOR
- [x] TECHNICIAN
- [ ] SALES MANAGER

PARTS INFORMATION

Four kits are available as follows:

MODEL	ENGINE	TRANSMISSION	PART NUMBER
Truck	2.0L	Manual	MD121954
		Automatic	MD121955
	2.6L	Both	MD121956
Montero	2.6L	Both	MD121957

Kit Components

The following components are contained in all kits except as noted.

PART NAME	QUANTITY
Compensator, High Altitude	1
Hose Assembly, Vacuum	1
Bracket, HAC	1
Bolt, Washer Assembled	2
Vacuum Assembly, Distributor	1
E-Clip (2.0L Truck Only)	1
Label, Emission Update	1

MODIFICATION PROCEDURE

1. Replace the distributor vacuum assembly with the new part in the kit as described in the Service Manual. On the distributors of 2.0L Truck engines, install a new E-clip from the kit.

2. Make sure the ignition timing is set to the correct specification as follows:

   a. Remove and plug the vacuum hoses on the distributor.

   b. Set ignition timing to the specifications shown below.

ENGINE	TIMING SPECIFICATION
2.0L	8° + 2° BTDC
2.6L	7° + 2° BTDC

   c. Reconnect the vacuum hoses to the distributor. The High Altitude Compensator will automatically advance the timing approximately 5° if at high altitudes.

4. Install the High Altitude Compensator (HAC) and vacuum hose assembly as follows:

   a. Install the HAC bracket on the Device Box in the engine compartment. Use the 2 bolts from the kit. *See Figures 1 and 2.*

   b. Remove the rubber caps from the carburetor (Figure 3) and Device Box (Figures 1 and 2).

   c. Install the vacuum hoses as indicated in the appropriate illustration.

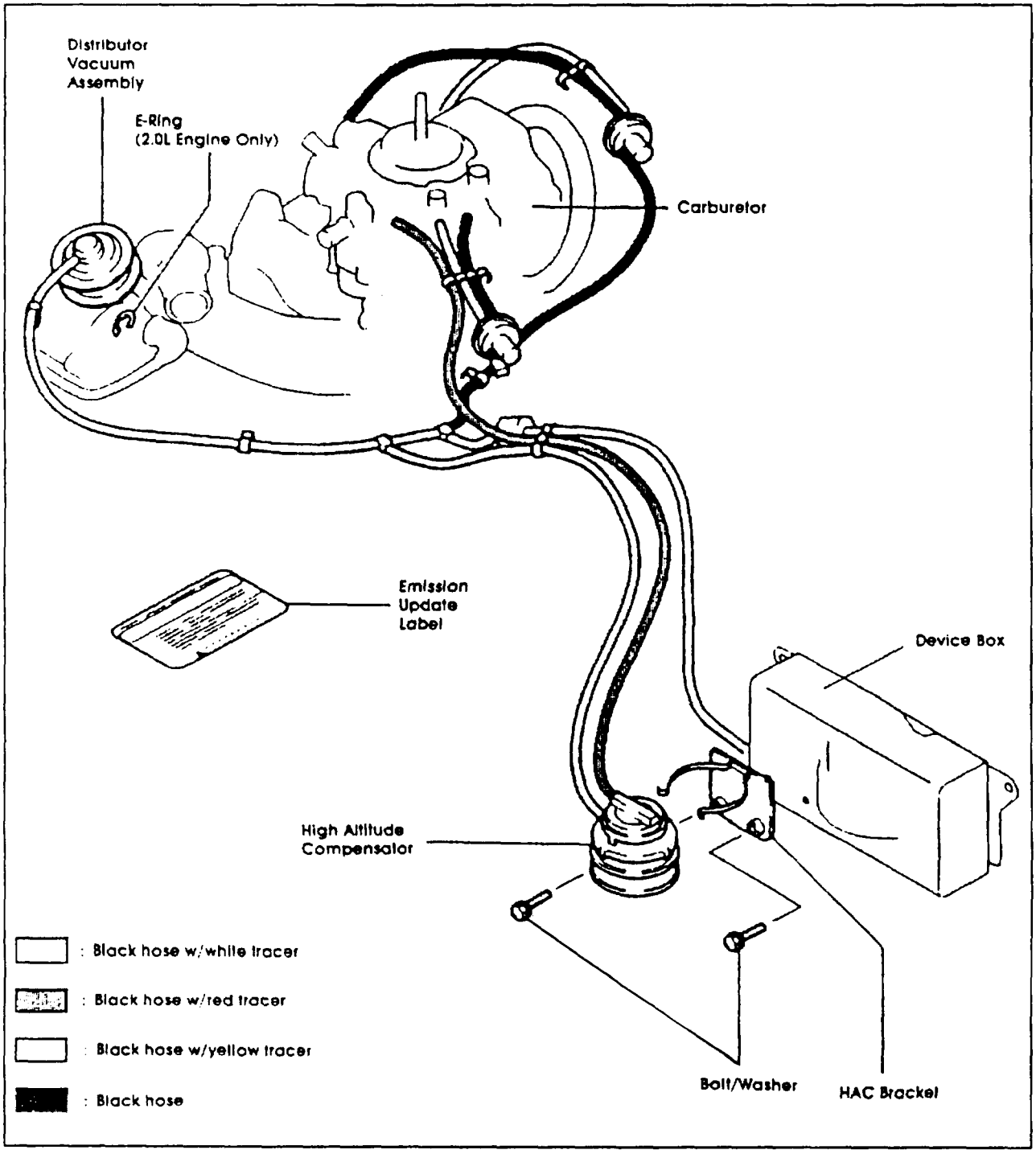

FIGURE 1 HAC and Vacuum Hose Installation for Truck 2.0L and 2.6L Engines.

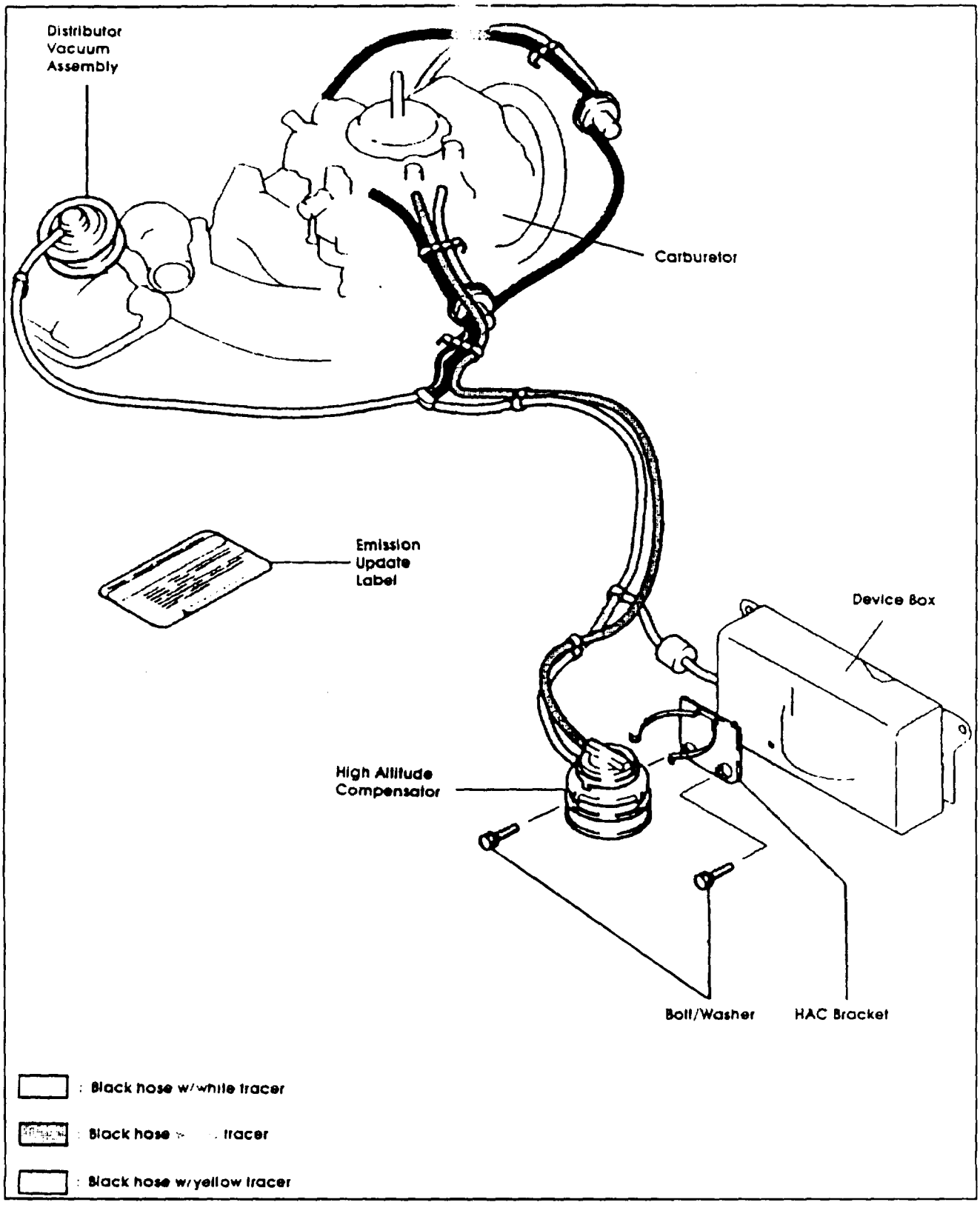

FIGURE 2 HAC and Vacuum Hose Installation for Montero 2.6L Engine.

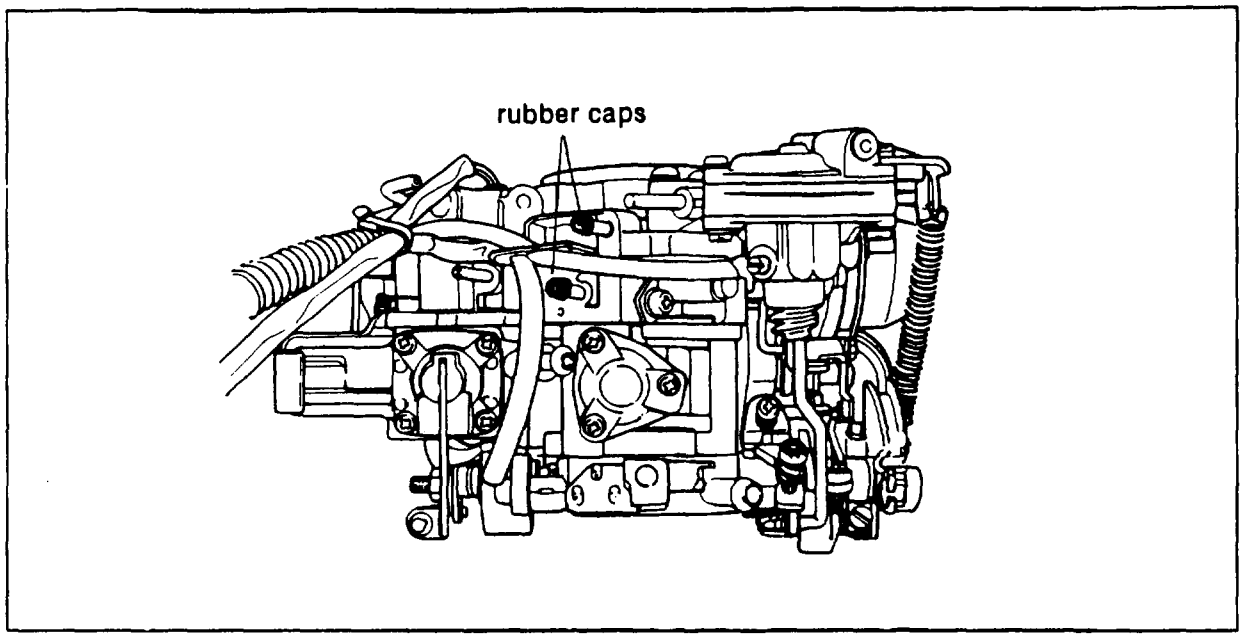

FIGURE 3

5. Apply the Vehicle Emissions Control Information Update Label on the underside of the hood in the location shown in Figure 4.

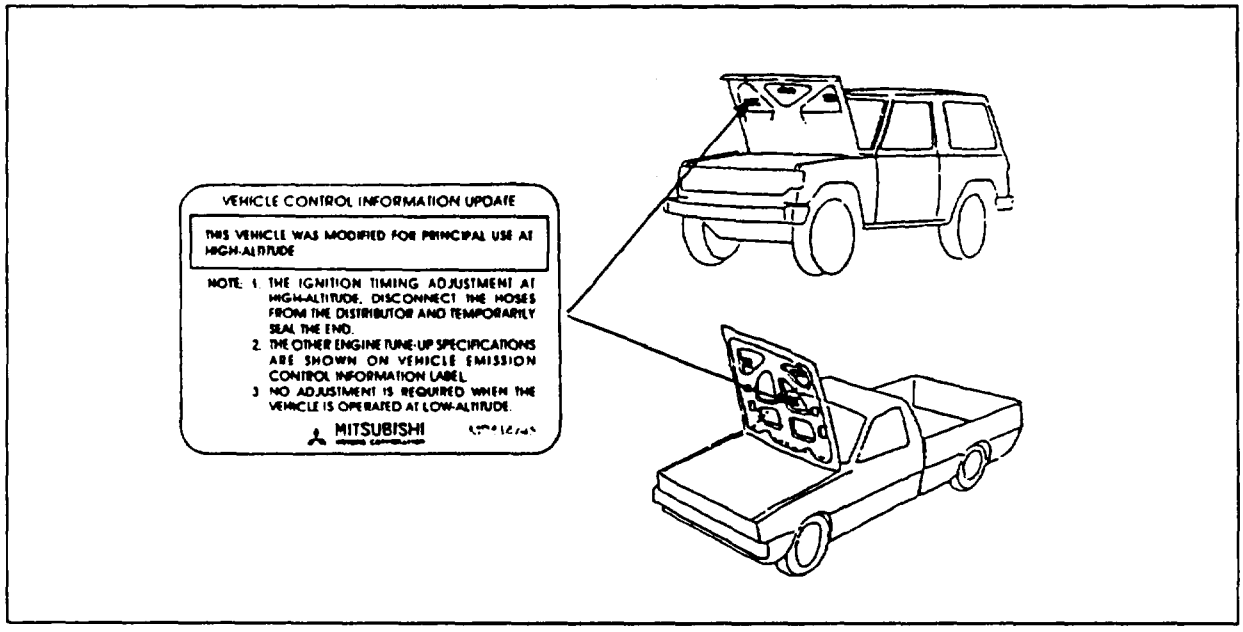
VEHICLE CONTROL INFORMATION UPDATE
THIS VEHICLE WAS MODIFIED FOR PRINCIPAL USE AT HIGH-ALTITUDE
NOTE: 1. THE IGNITION TIMING ADJUSTMENT AT HIGH-ALTITUDE. DISCONNECT THE HOSES FROM THE DISTRIBUTOR AND TEMPORARILY SEAL THE END.
2. THE OTHER ENGINE TUNE-UP SPECIFICATIONS ARE SHOWN ON VEHICLE EMISSION CONTROL INFORMATION LABEL.
3. NO ADJUSTMENT IS REQUIRED WHEN THE VEHICLE IS OPERATED AT LOW-ALTITUDE.
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FIGURE 4